rendering said process models as elements of a computer-based system in support of the work process, and

rendering said project models as elements of a computer-based system by support of the work process.

2. (Amended) A computer implemented method for modeling work processes comprising

instantiating a plurality of objects by abstract or concrete classes, and including at least a decision class and a data class,

relating each decision object to one or more data objects which it produces,
requiring, for at least one decision object, at least one data object as a prerequisite
to its activation or completion thereby establishing an interdependence between the decision
object requiring said data and the decision object providing said data, and

optionally generating additional subclasses or instances of said decision and data classes.

- 3. The method of claim 2 further comprising relating an arc or link class linking a first decision with a second decision.
- 4. The method of claim 2 further comprising

  generating a decision role class specialized into at least two subclasses, each with

  differing behaviors, and

defining for each decision role class the communication requirements among the

incumbents of roles participating in a decision, the rights of each such role class incumbents with respect to (a) entering data elements in a database, (b) modifying elements in a database and/or (c) reading elements from a database

 A computer implemented method for traversing networks including nodes and directed arcs comprising

utilizing messaging between said nodes and arcs and collections of said arcs, and determining the membership of said collections by at least one of their entry nodes and exit nodes.

- 6. (Amended) A computer implemented method of modeling and managing decision-making work processes among a plurality of participants comprising using a network whose nodes are abstract decision situations, and providing arcs directed by decisions based on logical precedence.
  - The method of claim 6 further comprising
     requiring nodes to support participation of multiple persons in differentiated roles.
  - 8. The method of claim 7, further comprising

requiring that incumbents of exactly one differentiated role make a choice modeled by an abstract decision situation, and

requiring that the incumbents of a second differentiated role have notice, elapsed time and access to the incumbent of the first role prior to the incumbent of said first role having made said choice,

requiring that the incumbents of a third differentiated role have the opportunity to inspect the results of the choice made by the incumbent of the first role after said choice, and to accept or reject said results, with or without reference to established criteria, and

requiring that the incumbents of a fourth differentiated role have timely notice of the results of the choice made by the incumbent of the first role after said choice.

9. The method of claim 8, further comprising

requiring that the incumbents of a fifth differentiated role have the opportunity to inspect the results of the choice made by the incumbent of the first role after said choice, and to accept or reject said results according to its conformance or non-conformance to established criteria.

10. The method of claim 1, further comprisingusing said process models to instantiate project models, andusing said process and project models to manage, direct, and control the work of

the process.

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11. The method of claim 2 further comprising

providing an abstract rule class as a subclass of the data class,

providing that said abstract rule class is specialized into concrete classes that include at least a class each of whose instances completely determine the result by choosing the value of its associated decision's data object, and

providing none or more additional concrete rule classes whose instances (i) determine the associated decision objects' requirement for some other specific data object, (ii) determine the associated decision objects' association with a specific role object, (iii) determine the incumbent of a specific role object associated decision's data object, and/or (iv) determine the use of a different role object associated with said decision object.

12. (Amended) A computer implemented method for managing work processes comprising

instantiating project models as instances of a decision process model comprised of interdependent decisions, to which said project models conform,

modeling processes using an extensible, object-oriented framework, and

mapping plural participants in the process using objects representing abstract and

concrete classes as elements of said framework.

13. (Amended) A computer implemented decision-making method for traversing work process models including nodes and directed arcs connecting said nodes comprising

initializing all directed arcs and arc collections with an inactive state,

activating an entry collection of directed arcs which share a common entry node upon completion of the entry node's function,

activating all members of said entry collection upon activation of said entry collection,

activating an exit collection of directed arcs which share a common exit node upon activation of any member of said exit collection, and

testing, upon activation of said exit collection, other members of said exit collection for said member's active/inactive state and if any member of said exit collection is inactive, then stop testing and return said exit collection to its inactive state, and otherwise, if all members have tested active, activate their common exit node.

## IN THE DRAWINGS:

Replace Figures 5, 7, 8 and 9 with the enclosed new Figures.

## **REMARKS**

Reexamination and reconsideration of the claims, as amended, are respectfully requested.

These claims have been rejected as being anticipated under 35 USC § 102(e) by Nock, U.S. Patent No. 6,144,967. In an interview with the Examiner, Applicant and his representative

pointed out that Nock was directed toward project management whereas the present invention is directed toward a system for modeling decision processes. It was determined, jointly, that the independent claims need to be amended to more clearly point out the decision-making aspect of the system, even though Applicant considered that the claims already clearly were directed to that subject matter. Applicant has, accordingly, amended the claims to better define the existing scope of the invention as pertaining to modeling decision processes, as opposed to project management. The amendment is being made solely to clarify the existing claims, not to redirect the claims to either new subject matter or to limit them in view of the art which is not directed to a system for modeling decision processes.

In particular, therefore, claim 1 has been amended to more clearly provide for a decision process having interdependent decisions and to which the project models conform, rendering the <u>process</u> models as elements of a computer-based system in support of the work process, and rendering the <u>project</u> models as elements of a computer-based system by support of the work process. It is important to note the difference between the process models and the project models.

The remaining claims have also been amended accordingly, to bring them in line with the discussions had with the Examiner.

In addition, I am enclosing drawings with new Figures 5, 7, 8 and 9, corresponding to the previously submitted marked drawings, to replace the corresponding drawings currently in the case.

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While the Examiner has suggested that a new search may be needed, it is respectfully submitted that the claims have not, in fact, changed direction or subject matter from those previously in the case, and that the original search should be sufficient. In particular, however, Nock is not pertinent to and does not render obvious the decision process modeling system to which the invention is directed.

Accordingly, it is respectfully submitted that the claims, as amended, should be found to be patentable over the cited art and that the case should be passed to issue in due course.

The Commissioner is authorized to debit any necessary fee or credit any overpayment relating to the above-identified application to Deposit Account No. 08-0219.

Respectfully submitted,

Date: 6/28/02

Reg. No. 26,098

Hale and Dorr LLP 60 State Street Boston, MA 02109 Tel. (617) 526-6000 Fax (617) 526-5000